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Hirotake Nozaki

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BEMBEN, RICHARD M

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/501,048	Applicant(s) NOZAKI ET AL.	
	Examiner RICHARD M. BEMBEN	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) 34-44 and 50-53 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 45 is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-17 and 19-31 is/are rejected.
- 7) ☒ Claim(s) 11, 18 and 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election, in accordance with 37 CFR 1.499, of Group I in the reply filed on 15 September 2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claim 49 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 49 defines a program embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). That is, the scope of the presently claimed program can range from paper on which the program is written, to a program simply contemplated and memorized by a person.

If amended to include the limitation "computer-readable medium" or similar phrase, please also cite the supporting disclosure as found in the originally filed specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4, 6, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,153,729 issued to Saito.

Regarding **claim 1**, Saito discloses a digital camera (c. 2, ll. 46-49; Figure 1) comprising:

- an insertion port into which a storage medium is inserted (c. 3, ll. 4-6);
- an imaging device (c. 2, ll. 50-57; Figure 1, "10");
- a controller that stores an image taken by the imaging device in the storage medium inserted into the insertion port (c. 3, l. 44 – c. 4, l. 14; Figure 1, "40"); and
- a medium detector that detects if the storage medium inserted into the insertion port is a storage medium limiting a number of overwrite (c. 2, l. 65 - c. 3, l. 13; c. 3, ll. 56-66; c. 4, ll. 22-37; c. 4, l. 67 - c. 5, l. 17).

Regarding **claim 2**, refer to the rejection of claim 1 and Saito further discloses a display device that displays that the storage medium limiting a number of overwrite is detected by the medium detector (c. 4, l. 67 - c. 5, l. 17; Figure 1, "48").

Regarding **claim 3**, refer to the rejection of claim 2 and Saito further discloses that the medium detector detects if the storage medium is the storage medium limiting a number of overwrite based upon information entered from the storage medium inserted into the insertion port (c. 2, l. 65 – c. 3, l. 13; c. 4, ll. 29-32).

Regarding **claim 4**, refer to the rejection of claim 2 and Saito further discloses that the insertion port includes a connector device to be connected to a plurality of connectors of the storage medium to be inserted (c. 3, ll. 4-6; Figure 1, "30") and the medium detector detects if the storage medium is the storage medium limiting a number

of overwrite based upon a difference in connectors of the storage medium to be connected to the connector device (c. 2, l. 65 – c. 3, l. 13; c. 4, ll. 29-32).

Regarding **claim 6**, refer to the rejection of claim 1 and Saito further discloses a delete disable processing device that lets all images to be stored in the storage medium become unable to be deleted (“write inhibit”) when the medium detector detects that the storage medium limiting a number of overwrite is inserted into the insertion port (c. 4, ll. 27-29; c. 4, l. 67 - c. 5, l. 17).

Regarding **claim 19**, refer to the rejection of claim 1 and Saito further discloses a residual capacity detector that detects residual capacity of the storage medium (c. 3, l. 67 - c. 4, l. 14; c. 4, l. 67 - c. 5, l. 17); and

a display device that performs a display prompting to change a storage medium based upon a detecting result of the residual capacity detector when the medium detector detects that the storage medium limiting a number of overwrite is inserted into the insertion port (c. 5, ll. 6-10).

5. Claims 1-3, 9, 10, 20-31, 33 and 46-49 are rejected under 35 U.S.C. 102(e) as being anticipated by US Pub. No. 2007/0109426 filed by Satoh et al, hereinafter “Satoh”.

Regarding **claim 1**, Satoh discloses a digital camera ([0164]-[0169] and Figure 2; [0385]-[0386] and Figure 92) comprising: an insertion port into which a storage medium is inserted ([0165]-[0166] and Figure 2, “10”); an imaging device ([0164] and Figure 2, “2”); a controller that stores an image taken by the imaging device in the storage

medium inserted into the insertion port ([0167], [0170]-[0175] and Figures 2 & 3, "12"); and a medium detector that detects if the storage medium inserted into the insertion port is a storage medium limiting a number of overwrite ([0346] and Figure 78, step "S41").

Regarding **claim 2**, refer to the rejection of claim 1 and Satoh further discloses a display device that displays that the storage medium limiting a number of overwrite is detected by the medium detector (Figure 78, step "S350").

Regarding **claim 3**, refer to the rejection of claim 2 and Satoh further discloses the medium detector detects if the storage medium is the storage medium limiting a number of overwrite based upon information entered from the storage medium inserted into the insertion port ([0341]).

Regarding **claim 9**, refer to the rejection of claim 1 and Satoh further discloses a display device that displays an executable instruction in the digital camera; and a display change processing device that changes a display of the display device based upon a kind of the storage medium detected by the medium detector ([0361]-[0366] and Figures 81 & 82).

Regarding **claim 10**, refer to the rejection of claim 9 and Satoh further discloses the display device displays the instruction including a delete instruction to delete an image stored in the storage medium and, when the medium detector detects that the storage medium limiting a number of overwrite is inserted into the insertion port, the display change processing device changes a display of the display device so as not to display the delete instruction ([0361]-[0366] and Figures 81 & 82).

Regarding **claim 20**, refer to the rejection of claim 1 and Satoh further discloses a delete instruction device that instructs to delete image data stored in the storage medium ([0359]-[0384] and Figures 79-91) wherein: when the medium detector detects that the storage medium limiting a number of overwrite is inserted into the insertion port, the delete instruction device instructs so as to nullify an image data area of the storage medium limiting a number of overwrite ([0359]-[0367] and Figure 82e).

Regarding **claim 21**, refer to the rejection of claim 1 and Satoh further discloses a delete instruction device that instructs to delete image data stored in the storage medium ([0359]-[0384] and Figures 79-91); and a selection device that selects one of a first delete method deleting the image data by nullifying an image data area of the storage medium limiting a number of overwrite and a second delete method assuming that the image data was deleted by changing data management information of the image data when the medium detector detects that the storage medium limiting a number of overwrite is inserted into the insertion port ([0359]-[0367] and Figure 82e).

Regarding **claim 22**, refer to the rejection of claim 20 and Satoh further discloses that the delete instruction device instructs so as to nullify the image data by overwriting the image data area of the storage medium limiting a number of overwrite with data ([0359]-[0367] and Figure 82e).

Regarding **claim 23**, refer to the rejection of claim 20 and Satoh further discloses that the medium detector detects if the storage medium inserted into the insertion port is an overwritable storage medium ([0346] and Figure 78, step "S341") and the delete instruction device instructs so as to change only data management information

corresponding to the image data stored in the overwritable storage medium when the medium detector detects that the overwritable storage medium is inserted into the insertion port ([0359]-[0367] and Figure 82e).

Regarding **claim 24**, refer to the rejection of claim 23 and Satoh further discloses that the data management information is record position information identifying where to record the image data stored in the storage medium ([0356]-[0358]).

Regarding **claim 25**, refer to the rejection of claim 20 and Satoh further discloses that when the medium detector detects that the storage medium limiting a number of overwrite is inserted into the insertion port, the delete instruction device instructs so as to nullify a record area of data management information corresponding to the image data and also record new data management information ([0359]-[0367] and Figures 82e, 87 & 88).

Regarding **claim 26**, refer to the rejection of claim 20 and Satoh further discloses that the delete instruction device instructs so as to nullify at least a portion of the image data area ([0359]-[0367]).

Regarding **claim 27**, refer to the rejection of claim 20 and Satoh further discloses that the delete instruction device instructs so as to nullify all of the image data area ([0359]-[0365]).

Regarding **claim 28**, refer to the rejection of claim 1 and Satoh further discloses a delete instruction device that instructs to delete image data stored in the storage medium ([0359]-[0384] and Figures 79-91), wherein: the delete instruction device

instructs a different delete method corresponding to a kind of the storage medium detected by the medium detector ([0359]-[0367] and Figures 82e & 86-88).

Regarding **claim 29**, refer to the rejection of claim 1 and Satoh further discloses a delete instruction device that instructs to delete image data stored in the storage medium ([0359]-[0384] and Figures 79-91); and a capacity detector that detects memory capacity of the storage medium inserted into the insertion port ([0371]-[0377] and Figures 86-88), wherein: when the medium detector detects that the storage medium limiting a number of overwrite is inserted into the insertion port, the delete instruction device instructs a different delete method corresponding to memory residual capacity of the storage medium limiting a number of overwrite detected by the capacity detector ([0359]-[0384] and Figures 79-91).

Regarding **claim 31**, refer to the rejection of claim 1 and Satoh further discloses a format instruction device that instructs to format the storage medium inserted into the insertion port, wherein: the format instruction device instructs a different format method corresponding to a kind of the storage medium detected by the medium detector ([0381]-[0384] and Figure 91).

Regarding **claim 32**, refer to the rejection of claim 31 and Satoh further discloses a notification device that notifies that formatting cannot get an increase in capacity when the medium detector detects that the storage medium limiting a number of overwrite is inserted into the insertion port (Figure 91).

Regarding **claim 33**, refer to the rejection of claim 1 and Satoh further discloses an optimization processing device that instructs so as to optimize data in the storage

medium inserted into the insertion port; and an optimization processing nullification processing device that nullifies an instruction to process an optimization by the optimization processing device when the medium detector detects that the storage medium limiting a number of overwrite is inserted into the insertion port ([0359]-[0384] and Figures 79-91).

Regarding **claim 46**, Satoh discloses an image storage apparatus comprising: a connecting device that connects to a storage medium recording image data ([0165]-[0166] and Figure 2, "10"); a delete instruction device that instructs so as to delete image data recorded in the storage medium connected to the connecting device ([0359]-[0384] and Figures 79-91); a medium detector that detects if the storage medium connected to the connecting device is a storage medium limiting a number of overwrite ([0346] and Figure 78, step "S341"); an image storage memory (Figure 1, "11"); and a delete control device that controls so as to receive image data recorded in the storage medium connected to the connecting device, store the received image data in the image storage memory and delete the image data of the storage medium automatically after storage thereof, wherein: when the medium detector detects that the storage medium limiting a number of overwrite is connected to the connecting device, the delete control device halts automatic deletion of the image data after storage thereof (Figure 78).

Regarding **claim 47**, refer to the rejection of claim 46 and Satoh further discloses when the medium detector detects that the storage medium limiting a number of

overwrite is connected to the connecting device, the delete control device prohibits the image data from being deleted automatically after storage thereof (Figure 78).

Regarding **claim 48**, refer to the rejection of claim 46 and Satoh further discloses that when the medium detector detects that the storage medium limiting a number of overwrite is connected to the connecting device, the delete control device inquires whether the image data is deleted ([0371]-[0377] and Figures 86-88).

Claim 49 is a program claim corresponding to apparatus claim 46. Therefore, claim 49 is analyzed and rejected as previously discussed with respect to claim 46.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of US Patent No. 5,642,458 issued to Fukushima et al. (hereinafter "Fukushima").

Regarding **claim 5**, Saito discloses the required limitations of claim 1, specifically a digital camera comprising a medium detector that detects various types of recording mediums (see above). However, Saito does not disclose that the medium detector detects the type of storage medium based on its external shape.

Fukushima discloses a digital camera (Figures 1, 3) comprising a detecting device that detects a difference in an external shape of the storage medium to be inserted and determines the type of storage medium based on the detecting result of the detecting device (c. 24, l. 55 - c. 25, l. 7). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to determine the type of storage medium based on the detecting result as disclosed by Fukushima in the digital camera disclosed by Saito in order to support storage mediums of varying shape and size.

8. Claims 7, 8, 13-15, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of US Patent No. 4,887,234 issued to Iijima.

Regarding **claim 7**, Saito discloses the required limitations of claim 1, specifically a digital camera comprising a medium detector that detects various types of recording mediums (see above). However, Saito does not disclose a delete instruction device that instructs to delete an image stored in the storage medium; and a nullification processing device that nullifies an instruction from the delete instruction device when the medium detector detects that the storage medium limiting a number of overwrite is inserted into the insertion port.

Iijima discloses a portable electronic comprising a delete instruction device that instructs to delete an image stored in the storage medium; and a nullification processing device that nullifies an instruction from the delete instruction device when the medium detector detects that the storage medium limiting a number of overwrite is inserted into

the insertion port (c. 5, l. 61 – c. 6, l. 11). Therefore, it would have been obvious to a person having ordinary skill in the art at the of time the invention to have a delete instruction device that instructs to delete and a nullification processing device that nullifies an instruction from the delete instruction device as disclosed by Iijima in the digital camera disclosed by Saito such that a user cannot delete protected data.

Regarding **claim 8**, Saito discloses the required limitations of claim 1, specifically a digital camera comprising a medium detector that detects various types of recording mediums (see above). However, Saito does not disclose a delete disable release instruction device that lets an image stored in the storage medium disabled to be deleted become capable of being deleted; and a nullification processing device that nullifies an instruction from the delete disable release instruction device when the medium detector detects that the storage medium limiting a number of overwrite is inserted into the insertion portion.

Iijima discloses a portable electronic comprising a delete disable release instruction device that lets an image stored in the storage medium disabled to be deleted become capable of being deleted; and a nullification processing device that nullifies an instruction from the delete disable release instruction device when the medium detector detects that the storage medium limiting a number of overwrite is inserted into the insertion portion (c. 5, l. 61 – c. 6, l. 30, “permanent storage possibility”). Therefore, it would have been obvious to a person having ordinary skill in the art at the of time the invention to have a delete disable release instruction device and a nullification processing device that nullifies an instruction from the delete disable

release instruction device as disclosed by Iijima in the digital camera disclosed by Saito such that a user cannot delete protected data.

Regarding **claim 13**, Saito discloses the required limitations of claim 1, specifically a digital camera comprising a medium detector that detects various types of recording mediums (see above). However, Saito does not disclose a delete instruction device that instructs to delete an image stored in the storage medium; and a delete method change processing device that changes a method of deleting the image based upon an instruction of the delete instruction device corresponding to a kind of the storage medium detected by the medium detector.

Iijima discloses a portable electronic comprising a delete instruction device that instructs to delete an image stored in the storage medium; and a delete method change processing device that changes a method of deleting the image based upon an instruction of the delete instruction device corresponding to a kind of the storage medium detected by the medium detector (c. 5, l. 61 – c. 6, l. 30). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have a delete instruction device that instructs to delete an image and a delete method change processing device as disclosed by Iijima in the digital camera disclosed by Saito in order to ensure that protected data is not deleted.

Regarding **claim 14**, refer to the rejection of claim 13 and Iijima further discloses that when the medium detector detects that the storage medium limiting a number of overwrite is inserted into the insertion port and also deletion of the image is instructed by the delete instruction device, the delete method change processing device writes

data in a storage area of information about an image to be deleted in the storage medium limiting a number of overwrite (c. 5, l. 61 – c. 6, l. 30, specifically c. 6, ll. 21-30).

Regarding **claim 15**, refer to the rejection of claim 13 and Iijima further discloses that when the medium detector detects that the storage medium limiting a number of overwrite is inserted into the insertion port and also deletion of the image is instructed by the delete instruction device, the delete method change processing device changes management information corresponding to a storage area of information about an image to be deleted in the storage medium limiting a number of overwrite to information indicating a non-vacant area (c. 5, l. 61 – c. 6, l. 30, specifically c. 6, ll. 21-30).

Regarding **claim 28**, Saito discloses the required limitations of claim 1, specifically a digital camera comprising a medium detector that detects various types of recording mediums (see above). However, Saito does not disclose a delete instruction device that instructs to delete image data stored in the storage medium, wherein: the delete instruction device instructs a different delete method corresponding to a kind of the storage medium detected by the medium detector.

Iijima discloses a portable electronic comprising a delete instruction device that instructs to delete image data stored in the storage medium, wherein: the delete instruction device instructs a different delete method corresponding to a kind of the storage medium detected by the medium detector (c. 5, l. 61 – c. 6, l. 30 and Figure 9). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have a delete instruction device as disclosed by Iijima in the digital camera disclosed by Saito in order to ensure that protected data is not deleted.

9. Claims 9, 12, 16, 17, 20, 22, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito in view of US Patent No. 6,683,650 issued to Yamamoto et al., hereinafter "Yamamoto".

Regarding **claim 9**, Saito discloses the required limitations of claim 1, specifically a digital camera comprising a medium detector that detects various types of recording mediums (see above). Saito further discloses a display device that displays various information to a user, including notifying the user that image data cannot be stored when the write inhibit flag is set (c. 5, l. 14-17; Figure 1, "48"). Hence, Saito discloses that a display change processing device that changes a display of the display device based upon a kind of the storage medium detected by the medium detector (i.e. write inhibit vs. non-write inhibit). However, Saito does not disclose that display device that displays an executable instruction in the digital camera.

Yamamoto discloses a digital camera (c. 5, ll. 1-67; Figure 8) comprising a display device that displays an executable instruction in the digital camera (c. 3, l. 62 – c. 4, l. 67; Figures 4-7). Therefore, it would have been obvious to a person having ordinary skill in the art at the of time the invention to display an executable instruction as disclosed by Yamamoto in the digital camera disclosed by Saito in order to supply a user with a graphic user interface for post capture operations.

Regarding **claim 12**, refer to the rejection of claim 9 and Yamamoto further discloses that when the medium detector detects that the storage medium limiting a number of overwrite is inserted into the insertion port, the display change processing

device changes a display of the display device so as to display a delete instruction dedicated for the storage medium limiting a number of overwrite (referring to Figure 5, when the image is protected, the lock icon appears).

Regarding **claim 16**, Saito discloses the required limitations of claim 1, specifically a digital camera comprising a medium detector that detects various types of recording mediums (see above). However, Saito does not disclose a delete instruction device that deletes an image stored in the storage medium; and a pre-announcement information display device that displays pre-announcement information on an image deletion to be performed by the delete instruction device when the medium detector detects that the storage medium limiting a number of overwrite is inserted into insertion port.

Yamamoto discloses a digital camera (c. 5, ll. 1-67; Figure 8) comprising a delete instruction device that deletes an image stored in the storage medium; and a pre-announcement information display device that displays pre-announcement information on an image deletion to be performed by the delete instruction device when the medium detector detects that the storage medium limiting a number of overwrite is inserted into insertion port (c. 3, l. 62 – c. 4, l. 67; Figure 5). Therefore, it would have been obvious to a person having ordinary skill in the art at the of time the invention to display pre-announcement information as disclosed by Yamamoto in the digital camera disclosed by Saito in order to confirm an operation with the user such that the user doesn't accidentally perform unwanted operations.

Regarding **claim 17**, refer to the rejection of claim 16 and Yamamoto further discloses that the pre-announcement information display device displays a notification notifying that the image to be deleted by the delete instruction device is unable to be restored (refer to Figure 5c).

Regarding **claim 20**, Saito discloses the required limitations of claim 1, specifically a digital camera comprising a medium detector that detects various types of recording mediums (see above). However, Saito does not disclose a delete instruction device that instructs to delete image data stored in the storage medium, wherein: when the medium detector detects that the storage medium limiting a number of overwrite is inserted into the insertion port, the delete instruction device instructs so as to nullify an image data area of the storage medium limiting a number of overwrite.

Yamamoto discloses a digital camera (c. 5, ll. 1-67; Figure 8) comprising a delete instruction device that instructs to delete image data stored in the storage medium, wherein: when the medium detector detects that the storage medium limiting a number of overwrite is inserted into the insertion port, the delete instruction device instructs so as to nullify an image data area of the storage medium limiting a number of overwrite (c. 3, l. 62 – c. 4, l. 67; Figures 4-7, nullifying data is the intention of the delete instruction; also note that this claim doesn't actually require the data to be nullified, just that the “device instructs so as to nullify”).

Regarding **claim 22**, refer to the rejection of claim 20 and Yamamoto further discloses that the delete instruction device instructs so as to nullify the image data by

overwriting the image data area of the storage medium limiting a number of overwrite with data (inherent in the delete process).

Regarding **claim 26**, refer to the rejection of claim 20 and Yamamoto further discloses the delete instruction device instructs so as to nullify at least a portion of the image data area (inherent in the delete process).

Regarding **claim 27**, refer to the rejection of claim 20 and Yamamoto further discloses the delete instruction device instructs so as to nullify all of the image data area (inherent in the delete process).

Allowable Subject Matter

10. Claim 45 is allowed.

11. Claims 11, 18, and 30 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter:

Regarding **claims 45 and 18**, prior art could not be found wherein a display device displays a notice notifying that deletion of an image by the delete instruction device cannot get an increase in storage capacity of the storage medium.

Regarding **claim 11**, prior art could not be found wherein a “delete disable release instruction” is not displayed on a display if a storage medium limiting a number of overwrite is inserted into the insertion portion.

Regarding **claim 30**, prior art could not be found wherein during the delete process: the capacity detector detects that the storage medium limiting a number of overwrite has memory residual capacity not enough to record new data management information in the storage medium limiting a number of overwrite, the delete instruction device instructs so as to nullify the image data area.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RICHARD M. BEMBEN whose telephone number is (571)272-7634. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/David L. Ometz/
Supervisory Patent Examiner, Art
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